

THE QUESTION OF SEWAGE IN METROPOLITAN SUBURBAN DISTRICTS.

SIR,—I hail with much gratification the extracts from the pamphlet by Mr. John Leslie in your number of this day, not as proposing either to vindicate the charges or defend the conduct of those so charged, but simply on account of the attention of practical men being thus drawn through your columns to a subject, that however deeply it has apparently arrested public attention, has hitherto been only theorized upon. According full credit to my Lord Lincoln for his untiring zeal in the matter, any broad legislation cannot meet the particular difficulties of individual localities; instead, therefore, of attempting to enter upon any discussion of this pamphlet, I will state the course I have taken in a suburban district, upon the wants of which, in regard to sewage, I have bestowed cheerfully much labour; and I would entreat our professional brethren, each in their own district, to address their attention to the subject; such a mass of useful evidence would thus be obtained, that subsequent legislation thereon would, by a variety of provisions, become applicable to each individual case; the parties interested (making such reports) knowing best their own grounds of complaint, which broad legislation may avoid giving relief to.

The power of appeal from a parish or an individual (described as existing in the Finsbury district) would appear as of much advantage over the present irresponsible authority of most commissions.

I am not prepared with Mr. Leslie to charge any commission with inutility in the execution of their duties: I sincerely believe their powers are too prescribed to afford the relief they would desire to give; and it would be absurd to imagine they individually were all Solons, and at their appointed conclaves could divine the wants of large districts. If in a public question, then, parties are too indolent to raise their voice as to their particular grievances, it cannot be wondered at that, as of necessity, broad legislation takes the place of detailed enactments upon fair ground of complaint, which would, so to speak, bring relief to each man's door.

I will set the example (instead of discussing the question at large) of confining myself to what has recently fallen within my own observation; if such a course is approved and followed, then by a similar discussion, comes the suggestions for remedy, and, I again repeat, a mass of evidence would thus be obtained that must be irresistible, and cannot be expected to be within the knowledge of those to whom we look for relief through legislation. All commissions of inquiry can only grapple with broad facts, sometimes perverted for particular interests, and at no time developing the whole truth. Blue book upon blue book may be heaped, like Pelion upon Ossa and Ossa upon Pelion, and still the case of individuals, nay, of whole localities, may have been uncare of; if we are therefore longer silent, the blame is to a great extent with us.

I would state, as introductory to the remarks I intend making, that it must not be assumed that I condemn the deep sewage described in Mr. Leslie's pamphlet as constructed in metropolitan districts; confining myself to endeavour to shew my objections to such sewage in a suburban district.

No parish round London (that I am aware of) having the power of making a rate for internal operations of drainage, the application for relief must necessarily be made to the commission within whose authority the district chances to be situated; such, then, was the case which drew my attention to the subject: a large and respectably inhabited locality feeling they had no power internally, applied to a court of commissioners to form a new district, and by the authority they possessed to raise the necessary funds by loan, to be repaid through the medium of a rate within a prescribed period. It may be well to pause, and state the condition of this district with respect to drainage, as defining the position of most suburban districts; the ground, naturally rising, partakes of the acclivity of the hills—at the extremities of the boundaries to some considerable extent. The land when used for agricultural purposes was drained by boundary ditches, and the course

of the hill water took that pointed out by nature, the whole of course flowing to the low lands. As the land became occupied by buildings, the front boundary ditches were arched over, but at no greater depth than they then existed, and the soil to the extent of these ditches was generally abandoned as public footpaths, under which was, and is, conveyed the filth of large neighbourhoods. In other cases, the ditches being in the rear of the buildings, drains were made thereto, but in this case the ditches were left uncovered. I mention these facts particularly, as I shall presently have occasion to allude to them as a strong ground of complaint against the limited and perfectly inefficient powers of commissions to remedy such evils.

With reference to the subsequent argument, it may be well to state what would appear to have been the intention of the original appointment of such commissions to be gathered from the recital of all the old Acts of Parliament, viz., to drain low lands.

The commission alluded to as being requested to append a new district, have under their control a considerable district below high-water mark, many portions of which were constantly flooded. They some years since exercised scientific and sound principles by constructing large, deep, reservoir sewers, having their exit at dead low-water, protected by gates during the tide, and having a fall of two inches in a mile only to prevent the pressure of back water forcing itself up the drains communicating therewith. This effectually answered the purpose, not only of affording relief to house drainage, but also as draining the level. These sewers were after a time extended to outlying districts, which, partaking of rising ground, the sewers naturally were at a very considerable depth. Thus stood the matter when application was made to append this new district; the houses on the portion thereof from which the application originated being situated 2,500 feet apart; the hill water taking its course through the centre of a large open space, partially deposited in a pond, and eventually finding vent by an easy, tortuous, deep ditch to the low lands. I was startled by the proposition of the mode of affording relief to house drainage (the object of the application) by finding it was the intention to construct a sewer 15 feet deep in communication with a sewer 20 feet deep, to be driven through this pond to take the hill water from its natural easy course at an immense declivity, which may be imagined when I state, had it been constructed as a reservoir sewer with the little described fall, it would have been 50 feet deep at its termination. I then considered that no owners of houses distant 1,250 feet would attempt to avail themselves of the proffered relief, and the water, like that in an inclined bottle, would always be at the bottom, and certainly flood (at times of unusual high tides and extraordinary run of hill water) the basements of all houses which had drains communicating, the heads of which were below the level of the back water; and I was confirmed in this by finding, that since the described continuation of the reservoir sewers in low land, the level was no longer drained, and basements frequently had water, under extraordinary circumstances, thrown back upon them to the extent of 2 feet in depth.

I took the liberty of addressing the court, stating the thorough uselessness of such a sewer for the desired object, and that there was no reason why the bill water should be taken such a depth under ground.

I also stated my opinion that the vast expenditure in the district in deep sewers had been money thrown away, to the damage of the rate-payer.

I have great pleasure in acknowledging the courtesy with which my communications were received, and the ready facilities afforded me to assist in the inquiry.

I then, after investigation, and having by the direction of the court been furnished with all necessary levels, suggested the construction of a small sewer near the houses on either side the common, to meet at a point of junction below the pond, and thence to take the natural course, which I found had a fall at its junction with these proposed new sewers of 13 feet, which, crossing a high road, say 10 feet deep, could eventually have its vent into the Thames at a higher level, but a depth of 20 feet could never thus be diverted. I met, at first, with

some considerable opposition, but the eventual result was my report being agreed to unanimously by the surveyors, and proposed by the court to be carried into effect.

I trust I shall have convinced your readers that, taking a rational course, commissioners of sewers are not such impracticable overbearing persons as they are frequently described; they can have no private object to serve, but I believe their powers are far too limited, and that we do not sufficiently and clearly define our wants. A sketch of the mode I would suggest I will, if acceptable, intrude on your columns at a future period.

Having put myself in communication with Mr. Chadwick, I have great pleasure in acknowledging the courtesy with which he has received it. GREENWAY ROBINS. Peckham, 8th August, 1845.

THE COURSE OF STUDY IN THE SCHOOL OF DESIGN.

I OBSERVE that your correspondents are continually arraigning the methods of instruction adopted in the School of Design, conceiving that at the most they produce but inferior draughtsmen, while they leave the primary object of design entirely disregarded. Mr. Pugin has given up all hope of its producing any good, as there is not enough study of nature. Your correspondent last week finds fault with some of the finest inventions of the ancients; and those most modest remonstrators, the students, consider it utterly useless, as the directors do not adopt that course of study which they, in their wisdom, think fit to prescribe. But among them all, for my part, I have read no attempt to disclose a practicable remedy. Fixing the capacity to design as the object of his exertions, the individual must first learn to draw straight lines and curves of every dimension, and in every possible combination. He must proceed to copy forms of acknowledged beauty, the productions of men who have studied the beauties of nature and concentrated them in their works; which will form his taste, and enable him to perceive what it is that constitutes real beauty. He should then study nature, in order to enrich and vary his knowledge. He must observe and imitate the various turns and combinations of leaves; the different forms of bodies, and most particularly the beautiful composition and arrangement which she everywhere presents; and, lastly, he must continually, unceasingly exercise himself in the production of works from his own imagination. These, I humbly conceive, are the most obvious means to the end proposed. It is clear that no one can design till he can make lines to express his intention, and to my mind at least equally clear, that he should not study nature till (as artists say) his eye is formed. There are many homplucked, crooked, ill-formed persons in life, but no one would wish them to be imitated; and this remark in a proportionate degree extends to all nature.*

Now, Sir, should you allow these theses to be true, allow me to apply them to the case in point. The professors of Somerset House first set a student to simple manipulation; they lead him on to the imitation of the best forms that can be procured; allow him the frequent review of beautiful designs of ornament, the loan of treatises on all the arts, and finally, to crown all, encourage him to design himself by the offer of prizes, and the great chance of employ by those gentlemen who offer them. This is at least my view of the case. If you deem this paper worth insertion, I hope these gentlemen will favour us with their remedy as an answer. I am, Sir, &c.,

Frith-street, Soho. J. MORGAN.

BEDSTEAD WITHOUT SCREWS.—We have recently examined a contrivance by Messrs. Palmer and Stepany, carpenters, of Church-street, Camberwell, for putting together bedsteads without screws. A metal projection fastened into one part of the frame fits into a socket at the other, and one turn of the hand makes the junction secure. It seems to us, from its simplicity and the saving of time effected by it, deserving of notice.

* Which proves that all nature is not fit for elementary study.